



GE
159 Plastics Avenue
Pittsfield, MA 01201
USA

Transmitted Via Overnight Delivery

October 5, 2006

Mr. Dean Tagliaferro, USEPA
c/o Weston
10 Lyman Street
Pittsfield, MA 01201

**Re: GE-Pittsfield/Housatonic River Site
Former Oxbow Areas A and C (GECD410)
Former Oxbow Areas J and K (GECD420)
Lyman Street Area (GECD430) – Properties West of Lyman Street
Addendum to Supplemental Information Package**

Dear Mr. Tagliaferro:

On June 15, 2006, the General Electric Company (GE) submitted to the United States Environmental Protection Agency (EPA) a Supplemental Information Package (SIP) for Former Oxbow Areas A and C, Former Oxbow Areas J and K, and the Lyman Street Area – Properties West of Lyman Street. EPA provided conditional approval of that SIP in a letter to GE dated July 7, 2006. The conditions in that letter related to the Vegetation Restoration Plans included in the SIP. Condition No. 1 noted that GE was in discussions with certain property owners regarding potential revisions to those plans, and it directed GE to request EPA approval prior to making revisions to the plans resulting from those discussions. Condition No. 2 directed GE to make certain revisions to the Planting Plans for the Lyman Street Area (West of Lyman Street). EPA's letter stated that, after revised Vegetation Restoration Plans have been finalized with the property owners and approved by EPA, GE should submit an addendum or addenda to the SIP showing the modified plans. This letter and its attachments constitute an Addendum to the SIP documenting the revised Vegetation Restoration Plans.

Former Oxbow Areas A and C

Based on discussions with the owner of the majority of the property within Former Oxbow Areas A and C, GE made several revisions to the tree planting plans contained in the Vegetation Restoration Plan for Former Oxbow Areas A and C (which was Attachment C to the SIP), notified EPA of those revisions verbally, and obtained verbal approval from EPA of those revised plans. The revised Vegetation Restoration Plan for Former Oxbow Areas A and C is provided as Attachment 1 to this letter. It includes the following modified elements, which will be implemented following completion of the ongoing remediation activities at Former Oxbow Areas A and C.

- Planting Area # 1 and # 2: A contiguous row of 38 Eastern Hemlock trees approximately 6 feet in height will be planted in these areas parallel to the boundary with Parcel I9-5-14 from the Housatonic riverbank to Hathaway Street, rather than planting the Box Elders originally proposed for these areas.

- Planting Area # 7: No trees will be planted in this area, as opposed to the original proposal for planting 14 Box Elders and 4 American Elms. However, this area will be seeded with warm-weather grass seed mix and mulched, as previously proposed.
- Planting Area # 9: No trees will be planted in this area, as opposed to the original proposal for planting 7 Box Elders and 5 Eastern Cottonwoods. Rather, the entire area of the former loam pile will be seeded and mulched.
- Planting Area # 11 and # 12: Fourteen Spruce trees approximately 8 to 10 feet in height will be planted in these areas, as shown in Attachment 1, in lieu of the trees previously proposed.
- Planting Area # 14: No changes to the original plan.

Former Oxbow Areas J and K

The only change from the Vegetation Restoration Plan for Former Oxbow Areas J and K (which was Attachment D to the SIP) relates to Planting Area # 2. Based on discussions with the owner of a property in this area, no trees or shrubs will be planted on Parcel K10-11-3. Rather than planting 22 shrub clusters (consisting of Silky Dogwood, Winterberry, Choke Cherry, and Northern Arrowwood) as previously proposed, 18 shrub clusters will be planted within Parcel K10-11-5 only. GE notified EPA of these revisions verbally, and obtained verbal approval from EPA of these revisions. The revised Vegetation Restoration Plan for Former Oxbow Areas J and K is provided as Attachment 2 to this letter. Remediation at Former Oxbow Areas J and K has been completed. The revised vegetation restoration activities will be implemented shortly.

Lyman Street Area (West of Lyman Street)

In the Vegetation Restoration Plan for Lyman Street Area (West of Lyman Street) (which was Attachment E to the SIP), GE has revised the Planting Plans for Planting Areas # 1 and # 2 in accordance with the requirements set forth in Condition # 2 of EPA's July 7, 2006 letter. The revised Vegetation Restoration Plan for Lyman Street Area (West of Lyman Street) is provided as Attachment 3 to this letter. GE will implement the revised plan for Planting Area # 1. As stated in EPA's July 7, 2006 letter, EPA will perform the plantings in Planting Area # 2.

Please feel free to contact me if you have any questions regarding this Addendum.

Sincerely,

Richard W. Gates/EGB

Richard W. Gates
Remediation Project Manager

BSS/csc
Attachments

cc: Tim Conway, EPA
John Kilborn, EPA
Holly Inglis, EPA
Rose Howell, EPA*
K.C. Mitkevicius, USACE
Susan Steenstrup, MDEP (2 copies)
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Jane Rothchild, MDEP*
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Mayor James Ruberto, City of Pittsfield
Pittsfield Department of Health
Michael Carroll, GE*
Andrew Silfer, GE
Roderic McLaren, GE*
James Nuss, BBL
James Bieke, Goodwin Procter LLP
Public Information Repositories
GE Internal Repository
Property Owner – Parcels I8-23-6 & I9-5-1 **
Property Owner – Parcel I8-23-4 *
Property Owner – Parcel I8-23-9 *

David J. Baker, ExxonMobil Corporation *
George W. Crimmins, Esq., McCusker,
Anselmi, Rosen, Carvelli & Walsh *
Property Owner - Parcel K10-10-6 *
Property Owner - Parcel K10-11-1 *
Property Owner - Parcel K10-11-2 *
Property Owner - Parcel K10-11-3 **
Property Owner - Parcel K10-11-5 *
Property Owner - Parcel K10-12-1 *
Property Owner - Parcel K10-13-1 *
Richard Drennan, Esq. *
Emil George, Esq. *
Property Owner – Parcels I9-4-14 & -19 **
Property Owner – Parcels I9-4-25 & -203*
Property Owner – Parcel I9-4-201*
Dorothy Mara, Esq., Hashim & Spinola
John Martin, Esq., Martin & Oliveira *
Richard Nasman, Berkshire Gas*
Dr. Ishwar Murarka, Ish, Inc.*
Kevin Hylton, KHES*
David Mauro, META*
Martin Booher, Esq., Leboeuf, Lamb*

* *without attachments*

** *with relevant attachments*

Attachments

Attachment 1

Revised Vegetation Restoration Plan – Former Oxbow Areas A and C

**GENERAL ELECTRIC COMPANY FORMER OXBOW AREAS A & C
TREE INVENTORY**

Inventory taken May 2006

By: Shannon Boomsma & Rachel Tomlinson of White Engineering, Inc.

Inventory of trees greater than 6" DBH

All area numbers correspond to numbers shown on planting plan entitled
Remediation Planting Plan for Former Oxbow Areas A & C (Dwg. No. 06-05-09-AC)

by White Engineering, Inc.

Area	Size	Species
1	36"	Box Elder
2	22"	Box Elder
	20"	Box Elder
	20"	Box Elder
3		Void of Vegetation
4		Void of Vegetation
5		Void of Vegetation
6		Void of Vegetation
7	17"	Box Elder
	13"	Box Elder
	6.6"	Box Elder
	12.2"	Box Elder
	17"	Box Elder
	14.6"	Elm
	9.4"	Elm
	8.3"	Box Elder
	10"	Box Elder
	9.3"	Box Elder
	11"	Elm
	8.5"	Box Elder
	8.6"	Box Elder
8		Void of Vegetation
9	9.8"	Box Elder
	12.6"	Box Elder
	6.3"	Box Elder
	8.2"	Box Elder
	17.3"	Box Elder
	11"	Box Elder
	25"	Cottonwood
	25"	Cottonwood
	7.9"	Box Elder

Area	Size	Species
10		Grassed Area
11	27"	Cottonwood
	9.6"	Box Elder
	18"	Cottonwood
	6.6"	Cottonwood
	8.2"	Box Elder
	6.9"	Elm
	6.6"	Red Maple
	7.4"	Elm
	8"	Box Elder
	6.6"	Box Elder
12	14.4"	Box Elder
	7.7"	Box Elder
	11.1"	Box Elder
	8.2"	Box Elder
	6.7"	Box Elder
	14.2"	Box Elder
	8.5"	Box Elder
	12.6"	Box Elder
	6.7"	Black Birch
	11.2"	Elm
	12"	Elm
13		Void of Vegetation
14	29"	Red Maple
	9.4"	Elm
	29"	Cottonwood
15		Pavement and Grassed Areas
16		Pavement and Grassed Areas
17		Pavement and Gravel

ATTACHMENT 1

ADDENDUM TO SUPPLEMENTAL INFORMATION PACKAGE FOR FORMER OXBOW AREAS A AND C FORMER OXBOW AREAS J AND K LYMAN STREET AREA (properties west of Lyman Street only)

**GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS**

REVISED VEGETATION RESTORATION PLAN FOR FORMER OXBOW AREAS A AND C

In conjunction with White Engineering, Inc. (White), GE has developed this Vegetation Restoration Plan to summarize the scope of vegetation restoration activities to be conducted within Former Oxbow Areas A and C following the completion of soil removal/replacement actions. This plan includes the planting of trees in certain areas where remediation actions occurred, and the seeding with a warm-season grass seed mix of all unpaved remediation areas.

This plan includes a number of attached work sheets and a figure prepared by White. The figure (Figure 06-05-09-AC) depicts the soil removal areas identified in the *Second Addendum to Final Removal Design/Removal Action Work Plan for Former Oxbow Areas A and C* (Second Work Plan Addendum), submitted in April 2006, as modified by the revised Technical Drawing 3 (Excavation Limits) submitted to EPA on June 13, 2006. That figure assigns a number to each soil removal area.

During the initial development of this Vegetation Restoration Plan, White conducted an inventory of trees that were located in areas subject to remediation actions and that had a diameter of at least 6 inches at breast height. This inventory showed the presence of such trees in 7 of the identified remediation areas (Areas 1, 2, 7, 9, 11, 12, and 14 on Figure 06-05-09-AC). See attached Tree Inventory. No shrubs were identified in any of the remediation areas. The results of this tree inventory were then used in developing the scope of tree planting activities to be conducted by GE within those areas subject to remediation actions, as discussed below.

As described in the Supplemental Information Package submitted to the EPA on June 15, 2006, the results of the above-referenced inventory of existing trees were used to develop a tree planting plan based on the approach of replacing the existing trees within areas subject to remediation actions at ratios of 1:1 for trees with a diameter between 6 and 12 inches and 2:1 or 3:1 for larger trees. However, based on subsequent discussions between GE and several property owners, GE has revised the above-mentioned tree planting plan. This revised plan will include the planting of trees in 5 of the 7 remediation areas where existing trees were removed by remediation activities. The revised scope of tree planting activities to be conducted by GE in these 5 areas is presented on the attached work sheets and is depicted on Figure 06-05-09-AC.

In addition to tree planting, the restoration activities to be conducted by GE at Former Oxbow Areas A and C will include seeding all unpaved areas impacted by remediation activities (i.e., all soil removal areas depicted on Figure 06-05-09-AC except Area 17 and the paved portions of Areas 15 and 16) with the warm-weather seed mix identified on the attached sheet titled "New England Native Warm Season Grass Mix."

ATTACHMENT 1

**ADDENDUM TO SUPPLEMENTAL INFORMATION PACKAGE FOR
FORMER OXBOW AREAS A AND C
FORMER OXBOW AREAS J AND K
LYMAN STREET AREA (properties west of Lyman Street only)**

**GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS**

**REVISED VEGETATION RESTORATION PLAN
FOR FORMER OXBOW AREAS A AND C**

Following implementation of these restoration actions, GE will conduct post-removal site control activities in accordance with the Post-Removal Site Control Plan provided in Attachment E of the EPA-approved *Final Removal Design/Removal Action Work Plan for Former Oxbow Areas A and C*, as revised in the Second Work Plan Addendum to reflect a comment from EPA. The periodic inspections referred to in that plan will include an evaluation of whether the vegetation that was planted or seeded during restoration activities is growing as anticipated. If those inspections indicate the need for additional planting or seeding to replace dead, dying, or sparse vegetation, such actions will be taken as soon as practicable after the inspections. In addition, once the planted trees have grown to sufficient size, the welded wire tree protectors that were installed around such trees (as described on the attached work sheets and Figure 06-05-09-AC) will be removed.

Additional details related to post-removal site control activities will be provided in the revised Post-Removal Site Control Plan to be included in the Final Completion Report for Former Oxbow Areas A and C.

NEW ENGLAND NATIVE WARM SEASON GRASS MIX

Botanical Name	Common Name	Percent by Weight
<i>Elymus virginicus</i>	Virginia Wild Rye	10
<i>Elymus canadensis</i>	Canada Wild Rye	10
<i>Panicum virgatum</i>	Switchgrass	20
<i>Sorghastrum nutans</i>	Indiangrass	10
<i>Festuca rubra</i>	Creeping Red Fescue	15
<i>Andropogon gerardii</i>	Big Bluestem	15
<i>Andropogon scoparius</i> (also <i>Schizachyrium s.</i>)	Little Bluestem	20
		<hr/> 100

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas A & C (Dwg. No. 06-05-09-AC)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 1 and # 2

Planting Area: 25,108 SF Total

Proposed Species and #: 38 Eastern Hemlock (*Tsuga canadensis*) 6 ft in height

Specifications:

To be planted parallel to Parcel I9-5-14 from the Housatonic riverbank to Hathaway Street

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas A & C (Dwg. No. 06-05-09-AC)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 11 and # 12

Planting Area: 8,060 SF Total

Proposed Species and #: 14 Norway Spruce (*Picea abies*) 8-10 ft in height

Specifications:

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas A & C (Dwg. No. 06-05-09-AC)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 14

Planting Area: 560 SF

Proposed Species and #: 3 Red Maple (*Acer rubrum*) 4–6 ft in height
 3 Eastern Cottonwood (*Populus deltoides*) 4–6 ft in height
 1 American Elm (*Ulmus americana*) 4–6 ft in height

Specifications:

Use 12” diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

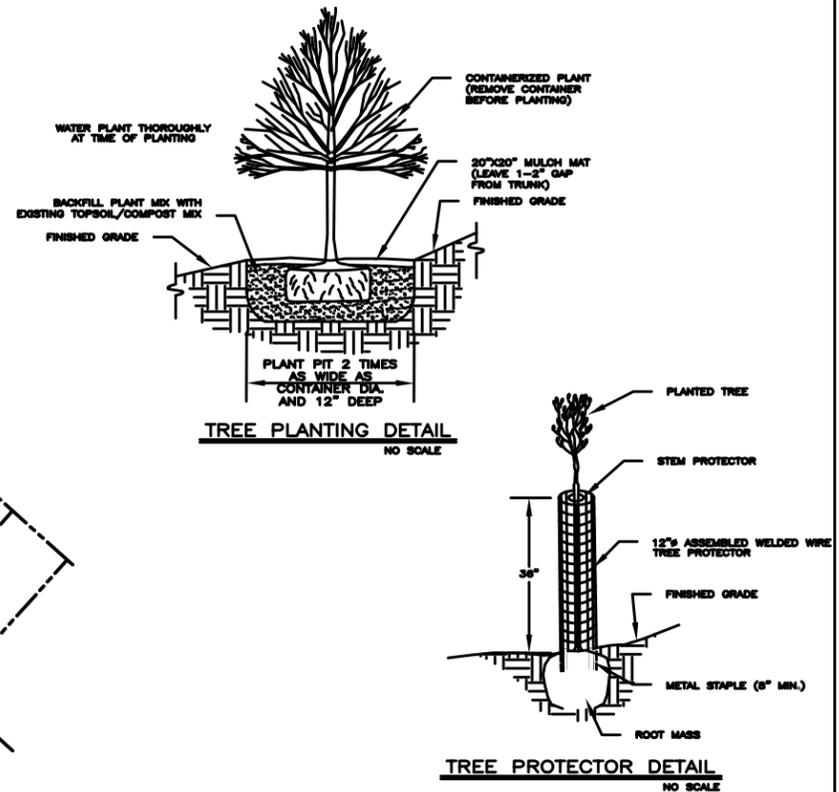
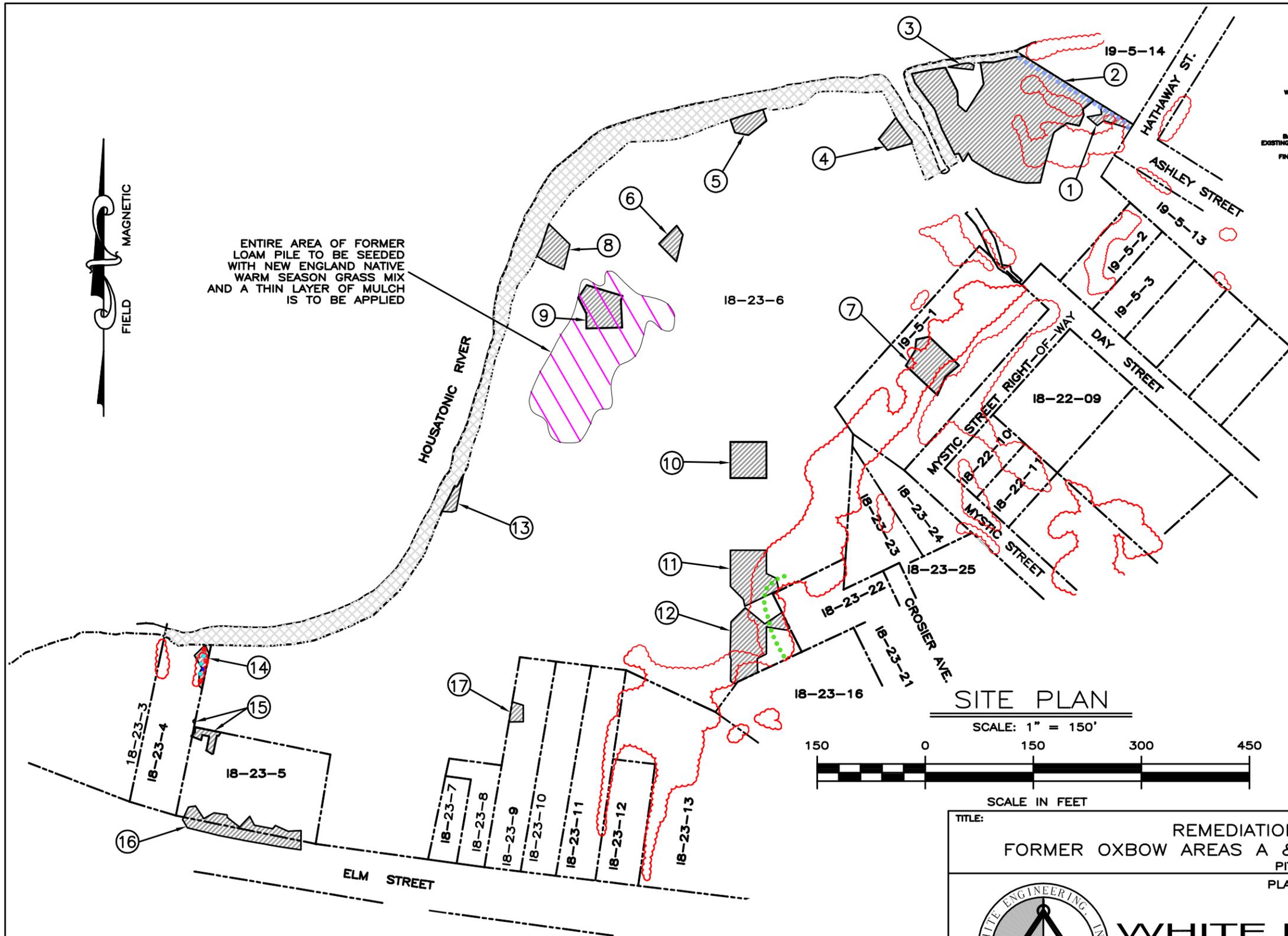
Submitted By:

Shannon Boomsma

White Engineering, Inc



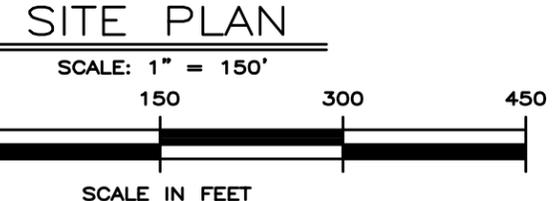
ENTIRE AREA OF FORMER LOAM PILE TO BE SEEDED WITH NEW ENGLAND NATIVE WARM SEASON GRASS MIX AND A THIN LAYER OF MULCH IS TO BE APPLIED



LEGEND

SPECIES	SYMBOL
RED MAPLE	●
AMERICAN ELM	●
COTTONWOOD	●
NORWAY SPRUCE	●
EASTERN HEMLOCK	● (REPRESENTS (2) TREES)

SYMBOL	DESCRIPTION
19-5-14	PARCEL ID
[Hatched Box]	SOIL REMOVAL AREA
[Cross-hatched Box]	AREA INCLUDED AS PART OF 1 1/2 MILE REACH REMOVAL ACTION
[Pink Hatched Box]	AREA OF FORMER LOAM PILE
[Red Dotted Line]	PREVIOUSLY EXISTING TREELINE
[Dashed Line]	PROPERTY LINE



TITLE: **REMEDATION PLANTING PLAN** for
FORMER OXBOW AREAS A & C prepared for **GENERAL ELECTRIC**
PITTSFIELD, MA

PLAN PREPARED BY:

WHITE ENGINEERING INC.
 CIVIL & ENVIRONMENTAL

55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201

DATE: SEPTEMBER 15, 2006	DR'N: RZT	AP'VD: MPW	DWG NO: 06-05-09-AC
DS'GN: NONE	OK'D: SDB	SCALE: AS NOTED	SHEET 1 OF 1

P:\Projects\2006\06-05-09 GE OXBOWS\06-05-09 Areas A & C_REV1.DWG, 10/5/2006 7:27:33 AM, PDF995

Attachment 2

Revised Vegetation Restoration Plan – Former Oxbow Areas J and K

**GENERAL ELECTRIC COMPANY FORMER OXBOW AREAS J & K
PLANT INVENTORY**

Inventory taken May 2006

By: Shannon Boomsma & Rachel Tomlinson of White Engineering, Inc.

Inventory of trees greater than 6" DBH

All area numbers correspond to numbers shown on planting plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

by White Engineering, Inc.

Area	Size	Species
1	No Trees, but Shrubs and Grasses Present	
2	21"	Cottonwood
	21"	Cottonwood
	Shrubs and Grasses	
3	Grassed Area	
4	Asphalt Parking Area	
5	Landscaped Area	
6	Asphalt Parking Area	
7	Asphalt Parking Area	
8	8"	Red Maple
	15"	Cottonwood
	17.3"	Cottonwood
	23.2"	Cottonwood
	19.7"	Cottonwood
	8.4"	Cottonwood
	8"	Elm
	26"	Black Willow
	24"	Black Willow
	29"	Black Willow
	18"	Black Willow
9	Grassed Area	

Area	Size	Species
10	Gravel Parking Area	
11	Grassed Area	
12	7.4"	Ash
	16"	Elm
	30"	Cottonwood
	26"	Cottonwood
13	17.3"	Cottonwood
	15"	Cottonwood
	17"	Cottonwood
	13.4"	Cottonwood
14	17.3"	Elm
	13.5"	Elm
	13"	Elm
	6.8"	Elm
	11"	Hemlock
	12"	Hemlock
	12.1"	Elm
	12.1"	Hemlock
	Grassed Area	

ATTACHMENT 2

ADDENDUM TO SUPPLEMENTAL INFORMATION PACKAGE FOR FORMER OXBOW AREAS A AND C FORMER OXBOW AREAS J AND K LYMAN STREET AREA (properties west of Lyman Street only)

**GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS**

REVISED VEGETATION RESTORATION PLAN FOR FORMER OXBOW AREAS J AND K

In conjunction with White Engineering, Inc. (White), GE has developed this Vegetation Restoration Plan to summarize the scope of vegetation restoration activities to be conducted within Former Oxbow Areas J and K following the completion of soil removal/replacement actions. The soil removal/replacement actions at Former Oxbow Areas J and K have been completed. This plan includes the planting of trees and/or shrubs in areas where remediation actions resulted in the removal of trees and/or shrubs, as well as the seeding with a warm-season grass seed mix of those areas where remediation actions disturbed the existing grass (i.e., areas not covered with gravel or pavement).

This plan includes a number of attached work sheets and a figure prepared by White. The figure (Figure 06-05-09-JK) depicts the soil removal areas identified in the *Addendum to Final Removal Design/ Removal Action Work Plan for Former Oxbow Areas J and K* (Work Plan Addendum), submitted in April 2006; and it assigns a number to each such area.

During the initial development of this Vegetation Restoration Plan, White conducted an inventory of trees and shrubs that were located in vegetated areas subject to remediation actions. This inventory identified the presence of trees that had a diameter of at least 6 inches at breast height, and it showed the presence of such trees in five of the identified remediation areas (Areas 2, 8, 12, 13, and 14 on Figure 06-05-09-JK). See attached Plant Inventory. The inventory also showed the presence of shrubs in two of the remediation areas (Areas 1 and 2 on Figure 06-05-09-JK). The results of this tree/shrub inventory were then used in developing the scope of tree and shrub planting activities to be conducted by GE within those areas subject to remediation actions, as discussed below.

As described in the Supplemental Information Package submitted to the EPA on June 15, 2006, the results of the above-referenced inventory of existing trees were used to develop a tree planting plan based on the approach of replacing the existing trees within areas subject to remediation actions at ratios of one tree for every tree removed with a diameter of 6-12 inches, two trees for every tree removed with a diameter of 12-24 inches, and three trees for every tree removed with a diameter greater than 24 inches. Tree species to be used during restoration activities were determined by the existing species observed in these areas. These proposed tree planting activities were designed to enhance the tree density within Former Oxbow Areas J and K compared to pre-remediation conditions. GE has slightly revised the above mentioned tree planting plan so that no trees will be planted within Planting Area # 2 on Parcel K10-11-3 based on subsequent discussions between GE and the property owner. The revised scope of tree planting activities to be conducted by GE within each of the four remaining remediation areas where existing trees were removed is presented on the attached work sheets and is depicted on Figure 06-05-09-JK.

ATTACHMENT 2

**ADDENDUM TO SUPPLEMENTAL INFORMATION PACKAGE FOR
FORMER OXBOW AREAS A AND C
FORMER OXBOW AREAS J AND K
LYMAN STREET AREA (properties west of Lyman Street only)**

**GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS**

**REVISED VEGETATION RESTORATION PLAN
FOR FORMER OXBOW AREAS J AND K**

GE's proposed planting plan will also involve the planting of a total of 20 clumps of shrubs (with 4 plants in each clump) in those areas where shrubs previously existed (except on Parcel K10-11-3, based on discussions with the owner of that parcel). This will include the planting of 2 clumps of shrubs in Area # 1 and 18 clumps in Area # 2, as shown on the attached work sheets for those areas.

In addition to tree and shrub planting, the restoration activities to be conducted by GE at Former Oxbow Areas J and K will include seeding the vegetated areas that were subject to remediation (i.e., the remediation areas not covered with gravel or pavement) with the warm-weather seed mix identified on the attached sheet titled "New England Native Warm Season Grass Mix."

Following implementation of these restoration actions, GE will conduct post-removal site control activities in accordance with the Post-Removal Site Control Plan provided in Attachment E of the EPA-approved *Final Removal Design/Removal Action Work Plan for Former Oxbow Areas J and K*, as revised in the Work Plan Addendum (Attachment G) to reflect a comment from EPA. The periodic inspections referred to in that plan will include an evaluation of whether the vegetation that was planted or seeded during restoration activities is growing as anticipated. If those inspections indicate the need for additional planting or seeding to replace dead, dying, or sparse vegetation, such actions will be taken as soon as practicable after the inspections. In addition, once the planted trees have grown to sufficient size, the welded wire tree protectors that were installed around such trees (as described on the attached work sheets and Figure 06-05-09-JK) will be removed.

Additional details related to post-removal site control activities will be provided in the revised Post-Removal Site Control Plan to be included in the Final Completion Report for Former Oxbow Areas J and K.

NEW ENGLAND NATIVE WARM SEASON GRASS MIX

Botanical Name	Common Name	Percent by Weight
<i>Elymus virginicus</i>	Virginia Wild Rye	10
<i>Elymus canadensis</i>	Canada Wild Rye	10
<i>Panicum virgatum</i>	Switchgrass	20
<i>Sorghastrum nutans</i>	Indiangrass	10
<i>Festuca rubra</i>	Creeping Red Fescue	15
<i>Andropogon gerardii</i>	Big Bluestem	15
<i>Andropogon scoparius</i> (also <i>Schizachyrium s.</i>)	Little Bluestem	20
		<hr/> 100

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 1

Planting Area: 309 SF

Proposed Species and #: 2 Silky Dogwood (*Cornus amomum*) 3-4 ft in height
2 Winterberry (*Ilex verticillata*) 3-4 ft in height
2 Choke Cherry (*Aronia melanocarpa*) 3-4 ft in height
2 Northern Arrowwood (*Viburnum dentatum*) 3-4 ft in height

Specifications:

Shrubs to be clumped 4-ft on center

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 2 (within Parcel K10-11-5 only)

Planting Area: 5,799 SF

Proposed Species and #: 18 Silky Dogwood (*Cornus amomum*) 3-4 ft in height
18 Winterberry (*Ilex verticillata*) 3-4 ft in height
18 Choke Cherry (*Aronia melanocarpa*) 3-4 ft in height
18 Northern Arrowwood (*Viburnum dentatum*) 3-4 ft in height

Specifications:

Shrubs to be clumped 4-ft on center

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 8

Planting Area: 3,786 SF

Proposed Species and #: 2 Red Maple (*Acer rubrum*) 4–6 ft in height
 9 Eastern Cottonwood (*Populus deltoides*) 4–6 ft in height
 10 Black Willow (*Salix nigra*) 4–6 ft in height

Specifications:

Use 12” diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 12

Planting Area: 614 SF

Proposed Species and #:

- 6 Eastern Cottonwood (*Populus deltoides*) 4–6 ft in height
- 2 American Elm (*Ulmus americana*) 4–6 ft in height
- 1 White Ash (*Fraxinus americana*) 4–6 ft in height

Specifications:

Use 12” diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 13

Planting Area: 627 SF

Proposed Species and #: 8 Eastern Cottonwood (*Populus deltoides*) 4–6 ft in height

Specifications:

Use 12" diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Former Oxbow Areas J & K (Dwg. No. 06-05-09-JK)

The Planting Area listed below corresponds to the similarly numbered excavation area shown on the plan noted above, prepared by White Engineering, Inc., dated September 15, 2006.

Planting Area: # 14

Planting Area: 3,150 SF

Proposed Species and #: 9 American Elm (*Ulnus americana*) 4–6 ft in height
 4 Eastern Hemlock (*Tsuga canadensis*) 4–6 ft in height

Specifications:

Use 12” diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

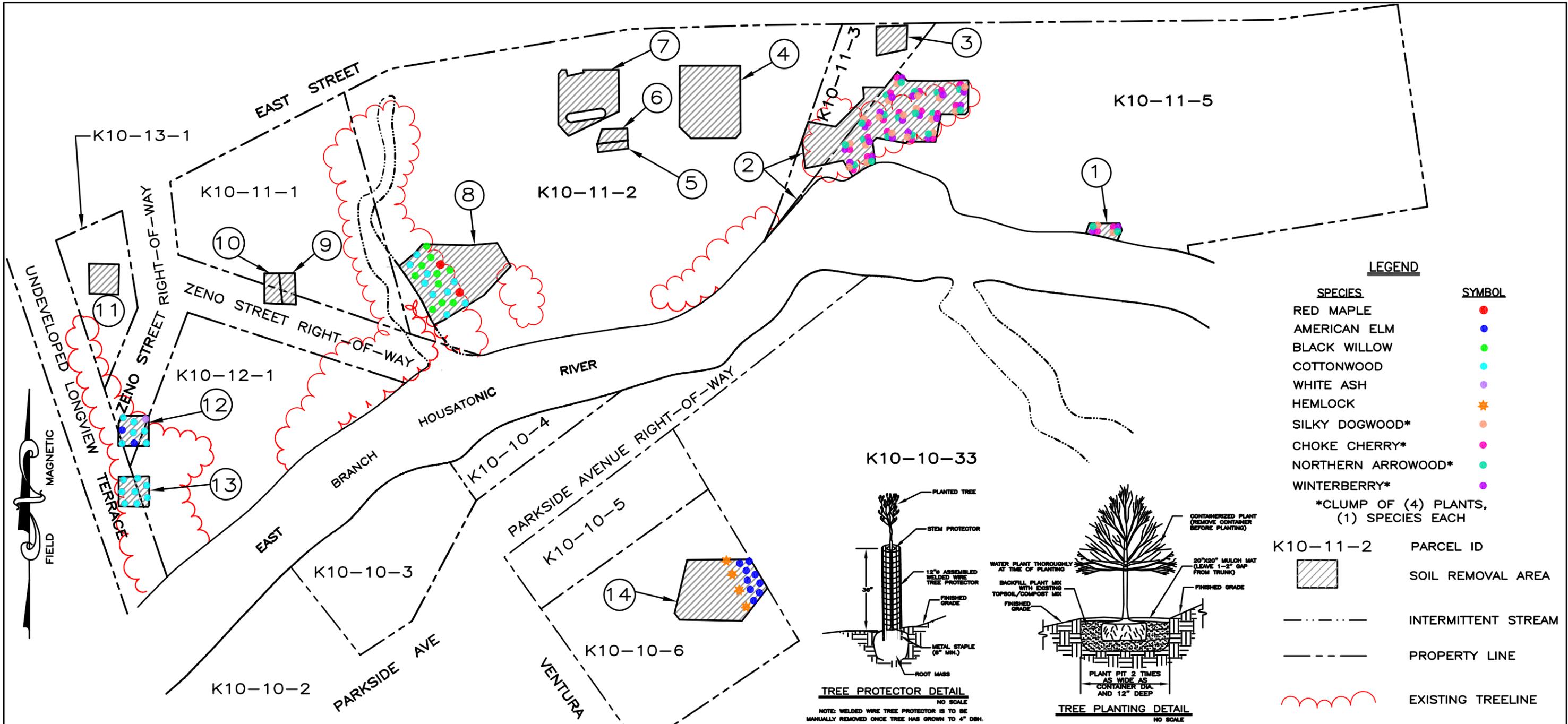
Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

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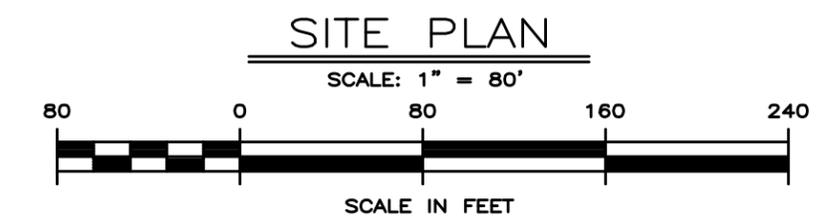
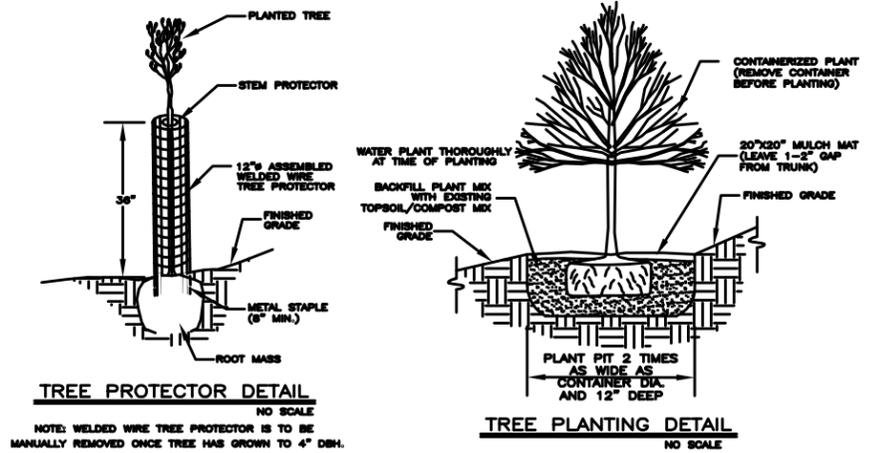


LEGEND

SPECIES	SYMBOL
RED MAPLE	●
AMERICAN ELM	●
BLACK WILLOW	●
COTTONWOOD	●
WHITE ASH	●
HEMLOCK	★
SILKY DOGWOOD*	●
CHOKE CHERRY*	●
NORTHERN ARROWOOD*	●
WINTERBERRY*	●

*CLUMP OF (4) PLANTS, (1) SPECIES EACH

K10-11-2	PARCEL ID
[Hatched Box]	SOIL REMOVAL AREA
[Dashed Line]	INTERMITTENT STREAM
[Solid Line]	PROPERTY LINE
[Red Wavy Line]	EXISTING TREELINE



DATE: SEPTEMBER 15, 2006	DR'N: RZT	AP'VD: MPW	DWG NO: 06-05-09-JK
DS'GN: NONE	OK'D: SDB	SCALE: AS NOTED	SHEET 1 OF 1

TITLE: REMEDIATION PLANTING PLAN for FORMER OXBOW AREAS J & K prepared for GENERAL ELECTRIC PITTSFIELD, MA

PLAN PREPARED BY:

WHITE ENGINEERING INC.
CIVIL & ENVIRONMENTAL

55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201

Attachment 3

Revised Vegetation Restoration Plan – Lyman Street Area (west of Lyman Street)

ATTACHMENT 3
ADDENDUM TO SUPPLEMENTAL INFORMATION PACKAGE FOR
FORMER OXBOW AREAS A AND C
FORMER OXBOW AREAS J AND K
LYMAN STREET AREA (properties west of Lyman Street only)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

REVISED VEGETATION RESTORATION PLAN
FOR LYMAN STREET AREA (WEST OF LYMAN STREET)

This Vegetation Restoration Plan for the Lyman Street Area west of Lyman Street relates to two parcels – Parcels I9-4-14 and I9-4-19 (commonly owned) – which contain unpaved and previously vegetated areas. GE has developed this plan through discussions with both the U.S. Environmental Protection Agency (EPA) and the owner of those parcels, and in conjunction with White Engineering, Inc. (White), to summarize the scope of vegetation restoration activities to be conducted within the above-referenced parcels following the completion of soil removal/replacement actions at those parcels. During EPA’s remediation activities as part of the 1½ Mile Reach Removal Action, trees and shrubs were cleared from, and adjacent to, areas on those parcels subject to remediation actions as part of the Lyman Street Area Removal Action. This plan includes the planting of trees and shrubs in these areas, as well as the seeding with a warm-season grass mix of those areas that contained grass prior to the remediation activities conducted by EPA (i.e., areas that were not previously covered with gravel or pavement).

This plan includes two attached work sheets and a figure prepared by White. The figure (Figure 06-05-09-LS) depicts the soil removal areas identified in the *Addendum to Final Removal Design/Removal Action Work Plan for Lyman Street Area* (Work Plan Addendum), submitted in April 2006; and it also depicts and labels the areas in which vegetative restoration is proposed, as discussed below.

The scope of tree and shrub planting activities within Parcels I9-4-14 and I9-4-19 was developed after discussions with EPA and the owner of those parcels, and was subsequently revised based on comments provided by EPA in a July 7, 2006 letter to GE relating to a prior version of this Vegetation Restoration Plan. Based on that information, the planting of trees and shrubs will be performed within two tree/shrub planting areas on these parcels. One of these areas (Planting Area No. 1) is located within the southwest corner of Parcel I9-4-14, and the other area (Planting Areas No. 2) is an approximately 20-foot wide strip located along the top of bank of the Housatonic River, stretching from the west (from the Parcel I8-24-101/I9-4-14 property line) to the east (to the Parcel I9-4-19/I9-4-25 property line). The scope of tree and shrub planting activities within each of these two areas is presented on the attached work sheets. These activities will involve the planting of a total of 144 trees and 180 shrubs. GE will perform the planting activities in Planting Area No. 1, and EPA has advised GE that EPA will perform the planting activities within Planting Area No. 2.

In addition to tree and shrub planting, the vegetation restoration activities to be conducted by GE will include seeding the two tree/shrub planting areas, as well as the previously vegetated areas on these parcels that were subject to remediation (i.e., the remediation areas not covered with gravel or pavement), with the warm-season grass seed mix identified on the attached sheet titled “New England Native Warm Season Grass Mix.”

ATTACHMENT 3
ADDENDUM TO SUPPLEMENTAL INFORMATION PACKAGE FOR
FORMER OXBOW AREAS A AND C
FORMER OXBOW AREAS J AND K
LYMAN STREET AREA (properties west of Lyman Street only)

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

REVISED VEGETATION RESTORATION PLAN
FOR LYMAN STREET AREA (WEST OF LYMAN STREET)

Following implementation of these restoration actions, GE will conduct post-removal site control activities at these parcels in accordance with the applicable requirements (i.e., those relating to restored areas west of Lyman Street) set out in the Post-Removal Site Control Plan in Attachment F of the EPA-approved *Final Removal Design/Removal Action Work Plan for the Lyman Street Area*, as revised in the Work Plan Addendum (Attachment H) to reflect a comment from EPA. The periodic inspections referred to in that plan will include an evaluation of whether the vegetation that was planted or seeded during restoration activities is growing as anticipated. If those inspections indicate the need for additional planting or seeding to replace dead, dying, or sparse vegetation, such actions will be taken as soon as practicable after the inspections. In addition, once the planted trees have grown to sufficient size, the welded wire tree protectors that were installed around such trees (as described on the attached work sheets and Figure 06-05-09-LS) will be removed.

Additional details related to post-removal site control activities at these parcels will be included in the revised Post-Removal Site Control Plan to be included in the Final Completion Report for the Lyman Street Area.

NEW ENGLAND NATIVE WARM SEASON GRASS MIX

Botanical Name	Common Name	Percent by Weight
<i>Elymus virginicus</i>	Virginia Wild Rye	10
<i>Elymus canadensis</i>	Canada Wild Rye	10
<i>Panicum virgatum</i>	Switchgrass	20
<i>Sorghastrum nutans</i>	Indiangrass	10
<i>Festuca rubra</i>	Creeping Red Fescue	15
<i>Andropogon gerardii</i>	Big Bluestem	15
<i>Andropogon scoparius</i> (also <i>Schizachyrium s.</i>)	Little Bluestem	20
		<hr/> 100

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Lyman Street Area (Dwg. No. 06-05-09-LS)

The Planting Area listed below is shown on the plan noted above, prepared by White Engineering, Inc., dated June 14, 2006.

Planting Area: # 1

Planting Area: 6,721 SF

Proposed Species and #:

- 5 Black Willow (*Salix nigra*) 6–8 ft in height
- 5 Box Elder (*Acer negundo*) 6–8 ft in height

- 10 Silky Dogwood (*Cornus amomum*) 2–3 ft in height
- 10 Winterberry Holly (*Ilex verticillata*) 2–3 ft in height
- 10 Northern Arrowwood (*Viburnum dentatum*) 2–3 ft in height
- 10 Choke Cherry (*Prunus virginiana*) 2–3 ft in height

Specifications:

Shrubs to be clumped 4-ft on center

Trees and shrub clumps to be evenly spaced throughout planting area

Use 12" diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

Seed with New England Native Warm Season Grass Mix (specified on separate sheet) and apply a thin layer of mulch.

Submitted By:

Shannon Boomsma

White Engineering, Inc

Planting Plan

For

General Electric Company, Pittsfield, MA

For excavation limits as shown on attached plan entitled

Remediation Planting Plan for Lyman Street Area (Dwg. No. 06-05-09-LS)

The Planting Area listed below is shown on the plan noted above, prepared by White Engineering, Inc., dated June 14, 2006.

Planting Area: # 2

Planting Area: 8,310 SF

Proposed Species and #:

- 45 Black Willow (*Salix nigra*) 4–6 ft in height
- 45 Silver Maple (*Acer saccharinum*) 4–6 ft in height
- 44 Box Elder (*Acer negundo*) 4–6 ft in height

- 40 Red Osier Dogwood (*Cornus sericea*) 2–3 ft in height

- 25 Silky Dogwood (*Cornus amomum*) 2–3 ft in height
- 25 Winterberry Holly (*Ilex verticillata*) 2–3 ft in height
- 25 Northern Arrowwood (*Viburnum dentatum*) 2–3 ft in height
- 25 Choke Cherry (*Prunus virginiana*) 2–3 ft in height

Specifications:

Plant trees in unevenly spaced sinuous rows

Red Osier Dogwoods shall be planted within 2 feet of riverbank rip rap at 8-ft on center

Other shrubs to be clumped 4-ft on center in 12' x 50' oblong clumps 40-ft apart

Use 12" diameter welded wire tree protectors for all trees

Backfill plant pit with compost and topsoil

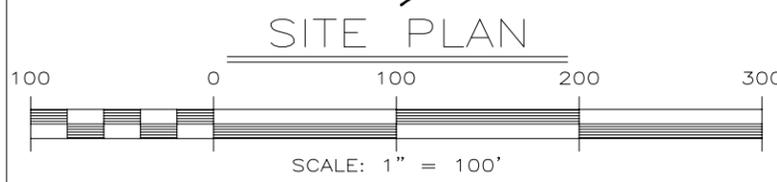
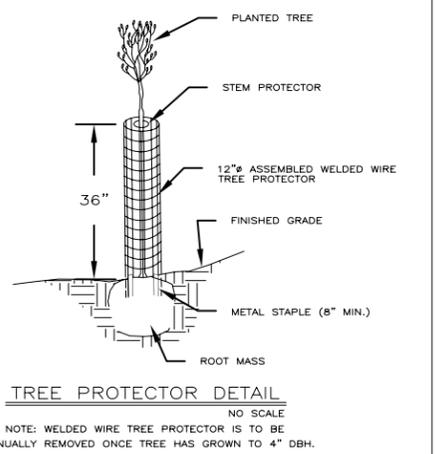
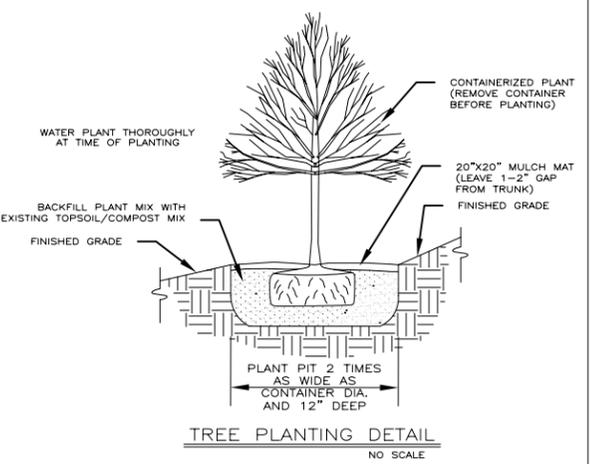
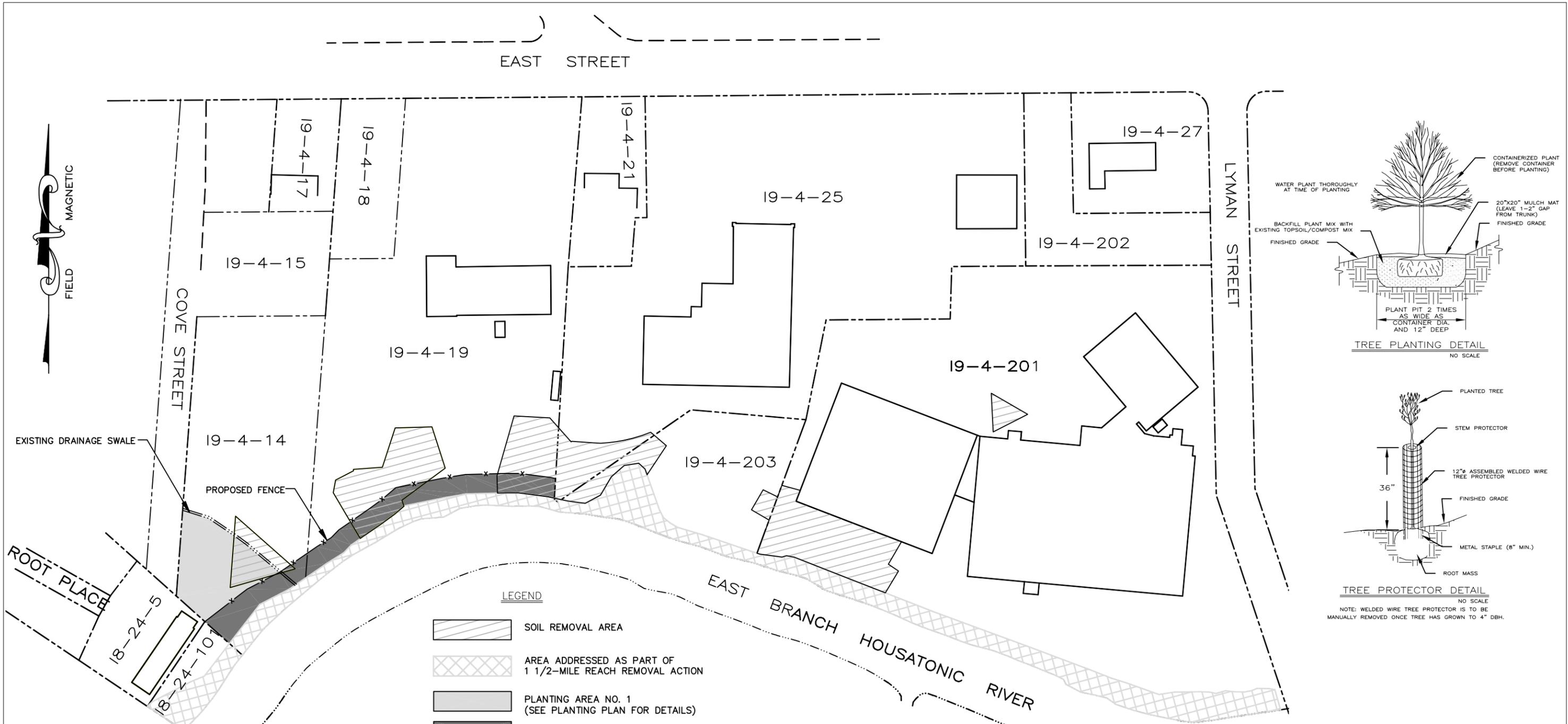
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Shannon Boomsma

White Engineering, Inc

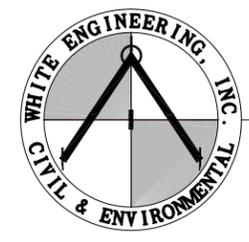
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SITE PLAN

- LEGEND**
- SOIL REMOVAL AREA
 - AREA ADDRESSED AS PART OF 1 1/2-MILE REACH REMOVAL ACTION
 - PLANTING AREA NO. 1 (SEE PLANTING PLAN FOR DETAILS)
 - PLANTING AREA NO. 2 (SEE PLANTING PLAN FOR DETAILS)
 - 19-4-19 PARCEL ID
 - - - - - PROPERTY LINE

TITLE: REMEDIATION PLANTING PLAN for LYMAN STREET AREA (WEST OF LYMAN STREET ONLY) prepared for GENERAL ELECTRIC PITTSFIELD, MA
 PLAN PREPARED BY:



WHITE ENGINEERING INC.
 CIVIL & ENVIRONMENTAL
 55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201

DATE: JUNE 15, 2006	DRN: RZT	APVD: MPW	DWG NO: 06-05-09-LS SHEET 1 OF 1
DSGN: NONE	CKD: SDB	SCALE: AS NOTED	